

Jc006 U.S. PTO
0010/00

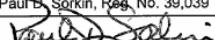
UTILITY PATENT APPLICATION TRANSMITTAL	
(Only for new nonprovisional applications under 37 CFR 1.53(b))	
Attorney Docket No. S1413/7000	
First Named Inventor or Application Identifier	
Elliot Shmukler and Joshua J. Schanker	
Express Mail Label No. EL310245862US	
Date of Deposit June 1, 2000	

APPLICATION ELEMENTS <small>See MPEP chapter 600 concerning utility patent application contents</small>		ADDRESS TO: Box Patent Application Commissioner for Patents Washington, DC 20231
<p>1. <input checked="" type="checkbox"/> Fee Transmittal Form <i>(Submit an original, and a duplicate for fee processing)</i></p> <p>2. <input checked="" type="checkbox"/> Specification [Total pages 32] 18 - pages description 1 - pages abstract 9 - pages claims 45 - Total claims 4 - Appendix A</p> <p>3. <input checked="" type="checkbox"/> Drawing(s) (35 USC 113) [Total sheets 30] <input type="checkbox"/> Informal <input checked="" type="checkbox"/> Formal [Total drawings 32]</p> <p>4. <input checked="" type="checkbox"/> Oath or Declaration [Total pages 3] a. <input checked="" type="checkbox"/> Newly executed (original) b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63(d)) <i>(for continuation/divisional with Box 17 completed [Note Box 5 below])</i> i. <input type="checkbox"/> DELETION OF INVENTOR(S) <i>Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).</i></p> <p>5. <input type="checkbox"/> Incorporation by Reference <i>(usable if Box 4b is checked)</i> The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.</p>		
ACCOMPANYING APPLICATION PARTS		
<p>6. <input type="checkbox"/> Microfiche Computer Program (Appendix)</p> <p>7. <input type="checkbox"/> Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. <input type="checkbox"/> Computer Readable Copy b. <input type="checkbox"/> Paper Copy (identical to computer copy) c. <input type="checkbox"/> Statement verifying identity of above copies</p> <p>8. <input checked="" type="checkbox"/> Assignment Papers/cover sheet & documents(s)</p> <p>9. <input type="checkbox"/> 37 CFR 3.73(b) Statement <i>(when there is an assignee)</i> <input type="checkbox"/> Power of Attorney</p> <p>10. <input type="checkbox"/> English Translation of Document <i>(if applicable)</i></p> <p>11. <input type="checkbox"/> Information Disclosure Statement PTO-1449 <input type="checkbox"/> Copies of IDS Citations</p> <p>12. <input type="checkbox"/> Preliminary Amendment</p> <p>13. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) <i>(Should be specifically itemized)</i></p> <p>14. <input type="checkbox"/> Small Entity Statement(s) <input type="checkbox"/> Statement filed in prior application, Status still proper and desired</p> <p>15. <input type="checkbox"/> Certified Copy of Priority Document(s) <i>(if foreign priority is claimed)</i></p>		
<p>16. Other:</p> <p>17. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information:</p> <p><input type="checkbox"/> Continuation <input type="checkbox"/> Divisional <input type="checkbox"/> Continuation-in-part (CIP) of prior application No.:</p> <p><input type="checkbox"/> Cancel in this application original claims of the prior application before calculating the filing fee.</p> <p><input type="checkbox"/> Amend the specification by inserting before the first line the sentence: This application is a <input type="checkbox"/> continuation <input type="checkbox"/> divisional of application serial no. , filed , entitled , and now .</p>		

18. CORRESPONDENCE ADDRESS*Correspondence address below*

ATTORNEY'S NAME	Paul D. Sorkin, Reg. No. 39,039				
NAME	Wolf, Greenfield & Sacks, P.C.				
ADDRESS	600 Atlantic Avenue				
CITY	Boston	STATE	MA	ZIP	02210
COUNTRY	USA	TELEPHONE	(617) 720-3500	FAX	(617) 720-2441

19. SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

NAME	Paul D. Sorkin, Reg. No. 39,039
SIGNATURE	
DATE	June 1, 2000

2025 RELEASE UNDER E.O. 14176

METHOD AND APPARATUS FOR DELIVERING CUSTOMIZED INFORMATION ACCORDING TO A USER'S PROFILE

Copyright Notice

5 A portion of the disclosure of this patent document contains material that is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent disclosure, as it appears in the Patent and Trademark Office patent and files or records, but otherwise reserves all copyright rights whatsoever.

10

TECHNICAL FIELD

The present invention is related to providing customized information according to a user's predefined criteria or profile.

15

BACKGROUND

The Internet has quickly become the primary source from which many people gather information they need to make many types of decisions. Research that people have done in the past is now being done over the Internet. Because there is so much information on the World Wide Web, however, it is oftentimes difficult for an individual 20 to gather together information relevant to the individual's interests or needs. This difficulty is due to the fact that there are so many different web sites that must be visited or accessed to obtain the information. Visiting a large number of web sites, however, is a very time intensive undertaking.

25

People look to the World Wide Web for information for many different reasons including accessing health or medical information, historical research, current events and sports information. Perhaps one of the most explosive areas of Internet usage is that of purchasing goods. A task that oftentimes required either traveling from one store to another in order to compare prices, scanning the ads in the Sunday paper or calling by telephone (and hoping to reach an informed salesperson) has now been replaced by 30 clicking into various web sites in order to identify the availabilities and prices of specific goods. While a person can do all of this from the convenience and privacy of his or her

DOCUMENT NUMBER: 10245862US

own home, traveling from store to store in order to determine what is on sale has been replaced by "surfing" from one web site to another web site to comparison shop.

To alleviate the drudgery of clicking from one web site to another to find the best price, programs called "shop-bots" are known. These are software programs that search the web to find the offered prices for a particular item. In operation, a user enters information about the item, e.g., brand name or model number. The shop-bot program then proceeds to search through a large number of web sites and returns with information regarding the product found from the various sites. The user then reviews the list of sites and prices that has been presented and can then access a particular web site directly.

One disadvantage of these shop-bots is that a particular shop-bot might only access sites that have paid a fee to be included in any searches that are performed. This may exclude, however, sites that have not paid but which have better prices for the particular item. A user of any particular shop-bot needs to know beforehand the inclusiveness or exclusiveness of the sites that will be searched to determine the accuracy of the results. Further, a shop-bot is only really helpful when the potential buyer knows the specific model that is desired. In a situation where the buyer is looking for a generic device without any limitations as to specific brand or model, e.g., any portable CD player, a shop-bot would either return too many results or might not be able to complete the search. A known example of such a shop-bot can be found at www.mysimon.com.

While it may be possible for a shopper to identify the best price for a particular item, this still does not address a shopper who is not necessarily actively looking for a particular item to buy but who is interested in knowing about items and their prices because an item of interest at the right price might cause the person to purchase it. Vendors would like to be able to inform potential buyers that an item is available at a certain price because the availability/price combination might be all that is necessary to entice a person to make the purchase. Of course, if the vendor cannot get the information to the buyer, then no sale will ever occur.

As an alternative to, or in conjunction with, a shop-bot that responds to a query, an individual can also sign up or register to receive a newsletter or notification of items of interest via e-mail. To tailor the newsletter to his or her interests, an individual completes a questionnaire or form that defines the individual's interests. The completed questionnaire defines the individual's profile.

After the profile is complete, it is used by the originator of the newsletter service to prepare a newsletter for delivery to the individual. As an example, the newsletter may be directed to identifying web sites that provide the goods or services that, according to the profile, are of interest to the individual.

5 Often, however, the individual is not receiving a newsletter that has been customized or prepared specifically for the individual. Instead, the completed profile is used to "lump" the individual into a group of individuals that, for the most part, have common interests. A single newsletter is prepared and bulk e-mailed to the group of individuals.

10 Providers of electronic newsletters group recipients together to send a single newsletter because preparing a single newsletter for a single user does not scale very efficiently for large numbers of individuals. As the number of recipients becomes larger, a significant amount of computing power, i.e., processors, storage devices and the like, would be necessary to generate the newsletters. If the newsletter is to be prepared in a timely manner, the equipment investment necessary for this mode of operation would be prohibitive.

15 Therefore, in order to provide a large number of individuals with information that has been timely prepared for each person according to his or her profile, and in a cost effective manner, a new mechanism or approach is necessary.

20 SUMMARY OF THE INVENTION

A system is provided that accepts a user's (i.e., a potential buyer's) profile to be used to notify that user of items for sale that are closely aligned with the user's interests. Via the Internet, a user completes a form on which various categories of products are listed. By identifying the categories and an associated level of interest in each category, 25 a profile of that user is created and stored. Subsequently, the stored profile is compared to information regarding all of the available items and a list of items most likely of interest to the user is created. The list will identify the item, its price and where the item can be purchased.

30 The list is transmitted to the user as a newsletter via e-mail. As part of the recording of the user's preferences, the user can also identify how often this letter or newsletter is sent in addition to how many different bargains should be identified.

In one aspect of the present invention there is provided a computer-implemented method of providing information regarding one or more items for sale to a user. The method comprises (a) comparing a user's stored profile data to data regarding a plurality of items; (b) identifying one or more items of interest to the user from the plurality of items according to the user's stored profile data; (c) organizing the identified one or more items of interest according to the user's stored profile data; (d) formatting a document representing the identified one or more items of interest as organized in step (c); and (e) providing the formatted document to the user.

In one aspect of the present invention there is provided a method of providing information regarding one or more items for sale to a user. The method comprises, under control of a client system, (a) displaying preference information to be selected by the user; and (b) upon completion of preference selection by the user, sending the selected preference information to a first server system. In addition, under control of the first server system, (c) receiving the selected preference information; (d) storing the selected preference information; (e) comparing the selected preference information to data representing one or more items available for purchase and determining one or more items of interest to the user; and (f) sending information regarding the identified one or more items of interest to the client system.

In one aspect of the present invention there is provided a server system for providing information to a user regarding one or more items for sale. The server system comprises a first data storage device storing item information on each item of a plurality of items for sale; a receiving component for receiving user purchase preference data from a client system; a second data storage device for storing the received user purchase preference data; a list generating component for comparing, for each respective user, the respective user purchase preference data to the stored item information to generate a list of one or more items for sale that may be of interest to the respective user; and a transmission component for transmitting the generated list to the respective user on the client system.

In one aspect of the present invention there is provided a computer program product comprising a computer-readable medium. Computer program instructions, on the computer-readable medium, when executed by a computer, direct the computer to perform a method of providing information to a user regarding one or more items for

sale. The method comprises: (a) comparing a user's stored profile data to data regarding a plurality of items; (b) identifying one or more items of interest to the user from the plurality of items according to the user's stored profile data; (c) organizing the identified one or more items of interest according to the user's stored profile data; (d) formatting a document representing the identified one or more items of interest as organized in step (c); and (e) providing the formatted document to the user.

In one aspect of the present invention there is provided a computer-implemented method of preparing and sending an electronic newsletter message prepared for each individual of a plurality of individuals. The method comprises: retrieving a profile associated with a first individual; identifying a newsletter template in the retrieved profile, said newsletter template having one or more variable fields each to be provided with data as a function of information in the retrieved profile; identifying an e-mail address in the retrieved profile; establishing a connection with a mail server associated with the identified e-mail address; sending the newsletter template to the mail server, and, if, as the newsletter template is being sent to the mail server, a variable field is encountered, providing data for the variable field as a function of information in the retrieved profile and sending the provided data in the place of the variable field; and continuing to send the newsletter template, wherein the newsletter template with its one or more variable fields each completed with provided data is sent to the identified e-mail address; and wherein no version of the newsletter template with one or more variable fields completed is stored other than on the mail server.

In one aspect of the present invention there is provided a system for preparing and sending an electronic newsletter message prepared for each individual of a plurality of individuals. The system comprises: means for retrieving a profile associated with a first individual; means for identifying a newsletter template in the retrieved profile, said newsletter template having one or more variable fields each to be provided with data as a function of information in the retrieved profile; means for identifying an e-mail address in the retrieved profile; means for establishing a connection with a mail server associated with the identified e-mail address; means for sending the newsletter template to the mail server, and, if, as the newsletter template is being sent to the mail server, a variable field is encountered, providing data for the variable field as a function of information in the retrieved profile and sending the provided data in the place of the variable field; and

means for continuing to send the newsletter template, wherein the newsletter template with its one or more variable fields each completed with provided data is sent to the identified e-mail address; and wherein no version of the newsletter template with one or more variable fields completed is stored on the system other than on the mail server.

5 In one aspect of the present invention there is provided a computer program product comprising a computer-readable medium. Computer program instructions on the computer-readable medium, when executed by a computer, direct the computer to perform a method of preparing and sending an electronic newsletter message prepared for each individual of a plurality of individuals. The method comprises: retrieving a profile associated with a first
10 individual; identifying a newsletter template in the retrieved profile, said newsletter template having one or more variable fields each to be provided with data as a function of information in the retrieved profile; identifying an e-mail address in the retrieved profile; establishing a connection with a mail server associated with the identified e-mail address; sending the newsletter template to the mail server, and, if, as the newsletter
15 template is being sent to the mail server, a variable field is encountered, providing data for the variable field as a function of information in the retrieved profile and sending the provided data in the place of the variable field; and continuing to send the newsletter template, wherein the newsletter template with its one or more variable fields each completed with provided data is sent to the identified e-mail address; and wherein no
20 version of the newsletter template with one or more variable fields completed is stored other than on the mail server.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will now be described with reference to the drawings,
25 which are intended to illustrate and not to limit the invention, and in which:

FIG. 1 is a schematic diagram of a client system and a server connected via a computer network;

FIG. 2 is a screen display of a preliminary screen for entering user information;

FIG. 3 is a flowchart describing operation according to an aspect of the present
30 invention;

FIG. 4 is a screen display of an initial screen for entering user information;

FIGs. 5A-5C are additional screen displays for entering user information;

FIGs. 6, 6A and 6B are screen displays for entering a user's relative interest information;

FIG. 7 is a screen display for recording a user's interest in a particular category;

FIGs. 8, and 8A-8C are screen displays of an electronically transmitted

5 newsletter;

FIG. 9 is a screen display of an item "clicked-on" from the newsletter;

FIG. 10 is a screen display of the item of FIG. 9 as found at a vendor's web site;

FIG. 11 is a screen display of the electronically transmitted newsletter as shown in FIG. 8A where an offer has expired;

10 FIG. 12 is a screen display shown when the expired link has been accessed;

FIGs. 13, 13A and 13B show a flowchart describing the populating of a newsletter with data;

FIGs. 14, and 14A-14E show an HTML template that operates according to the process of FIG. 13;

15 FIG. 15 is an example of a newsletter created according to the process of FIG. 13; and

FIG. 16 and 16A-16E is the source for the newsletter shown in FIG. 15.

DETAILED DESCRIPTION

20 The present invention is directed to providing a potential buyer with information regarding products for sale, i.e., bargains, that match the potential buyer's interest. With the present invention, a potential buyer provides information regarding preferences and levels of interest in various types of merchandise. This information is stored in a database. Information regarding products for sale are also stored in a database. Of course, the preferences data and the product data could be stored in either the same 25 database or separate databases that may be linked together.

The potential buyer's preferences are compared to the products that are available. A list of products that correlate to the potential buyer's interest is then provided to the potential buyer.

30 In one example of the present invention, the potential buyer provides the preference information by completing a form that is presented to the potential buyer on a client system connected to a server system via a computer network, e.g., the Internet.

The information regarding merchandise that may be of interest to the potential buyer is transmitted from the server system to the client system also via the computer network for display on the client system.

As shown in FIG. 1, a client system 100 includes a display 101 connected to a processing unit 102 that includes memory and data storage and to which a keyboard 104 is connected. The client system 100 is connected to the computer network (Internet) 108 via a communications link 106. The communications link 106 can be any one of, for example, a modem connection via a telephone line, a cable modem connection via a cable system, a wireless connection or any other medium that is known.

10 A server system 109 is also connected to the computer network via a communications link 110. The communications link 110 may be any one of the connection types as described above relative to communications link 106, however, because there is typically more data flowing back and forth from the computer network 108 to the server system 109, a higher bandwidth connection such as T1 may be 15 implemented. The server system 109 includes a server 112 connected to a database 118. Typically, the server 112 includes a processor and connected memory. Further, a display 114 and a keyboard 116 are connected to the server 112 to allow access by a web site operator.

20 In one example of the present invention, a user of the client system 100 will gain access to the computer network 108 and execute any one of a number of commercially available browser programs on the client system 100 to access the World Wide Web. In a preferred embodiment of the present invention, a user of the client system 100 would direct the browser to the web site www.bargaindog.com. This web site is operated by 25 the assignee of this application.

The server 112 of the server system 109 then transmits a web page for display on the display 101 of the client system 100. For World Wide Web applications, the page is an HTML form. Of course, any other compliant application may be used.

When a user operating the client system 100 accesses, for example, the 30 BargainDog.com web site, the user will be presented with an image of a home page 200 as shown in FIG. 2. The home page 200 is an HTML form that includes a name field 202 for the user to enter his or her first name and an e-mail address field 204 in which

the user's e-mail address can be entered. By clicking on a "Join Now!" button 206, the user begins a registration process as will be discussed below in more detail.

As already discussed above, one aspect of the present invention allows a user to define his or her shopping preferences that can be used to identify products of interest to the user. A flowchart of the steps implemented by one example of the present invention is presented in FIG. 3.

In step 300, a user inputs preferences regarding different categories of goods. The user's profile is stored in a database in step 302. Separately from the user inputting preferences, product descriptions including, e.g., manufacturer, model number, brief description, vendor name/location/web-site and price, are received from vendors in step 304. Each product is classified and stored in the database at step 306. The storing and classification of the products is transparent to the user's interaction with the web site.

The classification may involve providing the product with codes that identify attributes that can be used when compared to the individual's stored criteria. For example, and not one that is intended to be limiting, the product may be classified as to which gender the product applies, e.g., men's pants, the area, say, golf pants and the extent of the discount, for example, 45% off list price.

In step 308, algorithm rules to define matches between a user's shopping preferences and the products are defined. This algorithm controls the determination of which product or products match a user's shopping preferences. The criteria for matching a user's profile to the data in the database is easily definable by one of ordinary skill in the art.

In step 310, each user's shopping preference profile is compared to the products in the database. The most relevant bargains or products of interest to each user are then generated in step 312. Subsequently, at step 314, an e-mail newsletter is formatted for each user with a description of the top bargains generated in step 312. The newsletter is formatted to place the most relevant products in a prominent location in the newsletter. Finally, in step 316, the newsletter describing the bargains identified as being of interest to the user is sent to each user via e-mail. The preparation and sending of the newsletter will be discussed in more detail below.

The interaction between a user on the client system 100 and the web site on the server system 109 is accomplished via the computer network 108 and through the use of

web pages provided by the web server and displayed on the display 101 of the client system 100. The user's information with respect to e-mail address and shopping preferences is provided to the server system 109 by having the user enter data in the blank fields and transmitting the HTML documents with the completed fields back to the server system 109.

The presentation of web pages by the server system 109 to the client system 100, in one example, is accomplished by the presentation of documents formatted with HyperText Mark up Language (HTML). Of course, any similar mechanism for allowing a user to submit information by completing a form can also be used.

10 The home page 200, as presented in FIG. 2, allows a user to register by submitting a first name and e-mail address through an action of clicking on the "Join Now!" button 206.

15 When the user has clicked on the button 206, a screen similar to a screen 400 as shown in FIG. 4 is presented. The screen 400 includes, in a Subscriber Information section, the first name field 202 and the e-mail address field 204 as already filled in by the user. In addition, the user is prompted to confirm the e-mail address entered in the e-mail address field 204 by retyping it in an address confirmation field 402. In order to preserve a user's privacy and to prevent another from changing a user's profile without authorization, the user is prompted to provide a password in password field 404 and then 20 to confirm the password in a password confirmation field 406.

As shown in FIG. 5A, a next portion 500 of the subscriber information form is presented. As can be seen, the password field 404 and password confirmation field 406 are shown because the screen 500 represents the "scrolled down" portion from that which is shown in FIG. 4. Here the user chooses the format for the newsletter reporting 25 the items of interest. The user may choose either HTML enhanced 502 or text only 504 formats.

30 The user then chooses how often to receive the newsletter regarding items of interest by completing the field 506. In one example of the present invention, if a user clicks on the down arrow component 508 of the field 506, the available frequencies for which the newsletter may be received will be presented in field 506a as shown in FIG. 5B. Thus, the user only has to highlight one of the four choices presented in field 506a to choose how often to receive the newsletter.

Returning to FIG. 5A, the user also may choose how long the newsletter will be, i.e., how many items of interest will be reported. This selection is accomplished by choosing from the options presented in field 510. By clicking on the down arrow 512, the user is presented with the choices as to the length of the newsletter in field 510a as shown in FIG. 5C.

Some amount of personal information also may be entered by the user. Specifically, the user's zip code is entered in zip code field 514, the user's birthday is entered in fields 516a, 516b and 516c while the user's gender is identified by choosing either field 518 or field 520.

Once the foregoing fields are completed, a user clicks on a "Submit and go to customization page" button 522 to proceed to a next stage of user preference registration.

The user will then next be presented with a screen 600, as shown in FIG. 6A, showing a matrix 601 with different categories of products listed in horizontal rows and intersecting vertical columns describing various levels of interest.

As can be seen, there is an "Apparel & Accessories" category 602, a "Career & Professional" category 604 and a "Cooking & Food" category 606 among the listed categories. There are five levels of interest, one of which may be chosen by the user for each category of goods. Specifically, as shown in the matrix 601 there is a "Not Interested" level 608, a "Somewhat Interested" level 610, an "Interested" level 612, a "Very Interested" level 614 and an "Extremely Interested" level 616. In addition, by checking a box in a "Further Customize?" column 618, a user may refine his or her level of interest in the respective category of goods. This will be discussed in more detail below.

As an example shown in the matrix 601 displayed in FIG. 6A, a user has chosen the "Interested" level 612 for the "Apparel & Accessories" category 602 and has chosen to further customize information regarding this category by checking the box in the "Further Customize?" column 618 associated therewith. Further, the user has indicated that he or she is somewhat interested in the "Career & Professional" category 604 but does not want to further customize any information with respect to this category because the box has not been checked. With respect to the "Cooking & Food" category 606, the user has indicated no interest in this category.

Once the user has chosen a level of interest for all of the categories, or accepted the default settings, as shown in FIG. 6B, by clicking on a “Submit and continue to customize” button 620, the next level of customization is started.

The user is then presented with a screen 700, as shown in FIG. 7, where further information for those categories as identified in FIGs. 6A and 6B may be provided. As a representative example, the “Apparel & Accessories” category 602 is presented in a “Customized Apparel & Accessories” area 702. As shown, this particular example of customization includes refining the “Apparel & Accessories” category to include men 702a, women 702b and baby and toddler girls 702c. Similarly, a “Customize Career & Professional” area 704 is presented where more detailed information includes the choice of general workplace information 704a. Those other categories identified in FIGs. 6A and 6B as requiring further customization would be similarly refined.

Depending on the frequency chosen by the user, a list of bargains of interest to the user is generated and electronically transmitted to the user as a newsletter. The process of preparing the newsletter will be discussed in more detail.

The list of bargains of interest for the user is sent as a newsletter via e-mail to the user. Advantageously, the present invention is capable of sending a large number of these individually prepared newsletters without needing to use valuable resources to store the newsletter prior to sending. This allows a system operating the present invention to avoid the necessity, and therefore the costs, of storage devices such as hard disk drives and computer processing resources.

The present invention operates to prepare the newsletter generally according to the flowchart 1300 as shown in FIG. 13. As shown, in step 1302 the previously stored profile of an individual is retrieved. From that profile, step 1304, a newsletter format for the individual is retrieved. In one example of the present invention, two types of newsletter format are available: HTML format and plain-text. At step 1306 it is determined whether the newsletter format is plain-text. If the format is plain-text then at step 1308 the plain-text template is retrieved. If, on the other hand, the newsletter format for the individual is not plain text then at step 1310 the HTML template is retrieved. Subsequent to the retrieval of either the HTML or plain-text template, at step 1312, the e-mail address of the individual is retrieved from the profile. At step 1314, a connection is established with the e-mail server for the identified e-mail address of the individual.

This connection is established through conventional mechanisms that are not considered an aspect of the present invention. At step 1316, the system begins sending the template to the e-mail server. At step 1318, a point in the template is reached causing the suspension of the sending of the template to the e-mail server.

5 Subsequent to the suspension, at step 1320, a search of the database based on the retrieved individual's profile is begun to identify those items in the database that will be of interest to the individual. Once the items are identified, at step 1322 the system resumes sending the remainder of the template to the e-mail server. As will be discussed in more detail below, the template comprises variable fields that are filled with 10 information identified by the search conducted in step 1320.

At step 1324, a determination is made as to whether a variable field in the template has been reached or the end of the template has been reached. If a variable field has been reached then, at step 1326, the field is filled with the appropriate data from the search conducted at step 1320 and sent to the e-mail server, step 1327. At step 1328 a 15 determination is made as to whether or not the end of the template has been reached. If the end of the template has not been reached then at step 1330 the system continues to send the template and control returns back to step 1324. If the end of the template has been reached either at step 1328 or at step 1324 then control passes to step 1332 where the profile of the next individual is retrieved with the process returning to step 1304 to 20 begin the preparation of the transmission of a next newsletter to a next individual.

The present system populates the e-mail newsletter with information for the user while the newsletter is being sent. This preparation occurs "on the fly" and allows the present invention to customize the newsletter for the individual according to his or her profile without having to first generate the newsletter as a document, store the document, 25 connect with the individual's e-mail server, send the newsletter, delete it and then repeat these steps for each individual. The present invention does not dedicate storage for holding the newsletter prior to it being sent.

As shown in FIGs. 14 and 14A - 14E, an example of an HTML template includes code 1400 for creating an HTML formatted newsletter that is sent as an e-mail message. 30 As shown at element 1402 the template identifies the sender of the newsletter and at element 1404 the addressee field is a variable that is retrieved from the database. The

lines of code between lines 1406 and 1408 in FIG. 14B generate the ranked items of interest for the individual according to his or her criteria as defined in the stored profile.

Once the bargains for the particular user have been identified and prioritized, the subsequent lines of HTML code in the HTML template format and present the

5 information in the newsletter. It should be noted that the text template operates similarly to the HTML template. An example of the template that prepares a plain-text newsletter is presented in Appendix A.

In one example of formatting the newsletter, the top three items of interest are presented and displayed to the individual across the top of the newsletter. As described 10 below, each of these items includes a small graphic image representing the item in addition to a relatively detailed description. The remaining items are presented by category without, however, a graphic image being provided.

FIG. 15 represents an example of an HTML formatted newsletter received by a user of the present invention. As can be seen, hyperlinks 1502, 1504 and 1506 represent 15 the top three items identified for this particular user on this particular date. Each of these items includes a small graphic image and a written description of the item. A hyperlink is an element in an electronic document that links to another place in the same document or to an entirely different document. Typically, a user clicks on the hyperlink to follow the link. Typically the hyperlink is an implementation of a Uniform Resource Locator 20 (URL). A URL is a standard way that has been developed to specify the location of a resource that is available electronically. A URL is most commonly used when using a World Wide Web (WWW) client to link to WWW pages. The first part of the URL identifies the protocol that is being used. Typically, in WWW applications, the HyperText Transfer Protocol (HTTP) is commonly used. The remaining hyperlinks 25 1508, 1510, 1512 and 1514 are presented under their respective category heading but do not include a graphic representation of the item as compared to the formatting in which hyperlinks 1502-1506 are presented. The operation and functionality of these HTML formatted newsletters has been discussed above.

The HTML source for the HTML newsletter as shown in FIG. 15 is presented in 30 FIGs. 16 and 16A-16D. The source as presented in FIGs. 16 and 16A-16D resulted from the operation of the previously described HTML template when run for this particular user on the particular date identified.

As shown in FIG. 16A, portion 1602 is a URL that represents the graphic image portion of hyperlink 1502. Similarly, portions 1604 and 1606 are URLs that refer to the graphic portions of hyperlinks 1504 and 1506, respectively. Further, portions 1608, 1610 and 1612 represent the display of the respective prices for hyperlinks 1502, 1504
5 and 1506. Portions 1614, 1616 and 1618 represent the formatted information for the portions 1502, 1504 and 1506, respectively.

The remaining items of interest are also identified in the HTML source for the newsletter. One example is the portion 1620 which corresponds to hyperlink 1508 and its description. One of ordinary skill in the art of HTML coding will understand how the
10 remainder of the HTML newsletter is formatted by reviewing FIGs. 16A - 16D in comparison to the newsletter represented in FIG. 15.

The interaction of the recipient with an example newsletter listing items of interest will be discussed with reference to FIGs. 8A-8C. This newsletter is sent via e-mail to the e-mail address that the user entered in e-mail address field 204 upon
15 submitting his or her preferences. The newsletter includes descriptive hyperlinks to the three items which are identified by the system, step 312, as being of the most interest to this particular user.

As an example shown in FIG. 8A, there is a first hyperlink 802 describing address labels and a dispenser, a second hyperlink 804 to a book on family medicine and a third
20 hyperlink 806 to a free chocolate heart with card purchase. Additional items of interest to the user are presented by category. The first category is described by the "Apparel & Accessories" label 808 and includes a fourth hyperlink 810 to 14-Karat Gold Earrings. FIG. 8B shows a display 800b that is the next screen down from the display 800a as shown in FIG. 8A. As can be seen in FIG. 8B, additional categories and hyperlinks to
25 items within the categories are also displayed.

Returning to FIG. 8A, one example of the present invention provides pictures of the top three items in the hyperlinks 802, 804 and 806, whereas the remaining hyperlinks are only textual descriptions. It should be noted that the hyperlink is accessed by the user clicking on either the graphic image portion or the underlined text. As is known,
30 typically, when the user positions the arrow cursor over a hyperlink, the cursor turns into a hand image indicating a WWW page or document may be accessed.

When a user receives the newsletter and has an interest in one or more of the items described therein, the user may obtain additional information by clicking on the particular hyperlink. As an example, if the user were to click on the first hyperlink 802, he or she would be directed to additional information about this item in the form of 5 another screen 900, i.e., an HTML document, as shown in FIG. 9. As can be seen, additional information regarding the address labels and dispenser is presented. Another hyperlink 902 is displayed in the screen 900. This information resides on the server system 109 although, in an alternate example, the information may be residing on a different server. Screen 900 includes another hyperlink 902 directed to the vendor of, in 10 this case, the address labels and dispenser. When the user clicks on the hyperlink 902, he or she is then directed to the web site of that particular vendor, as shown in FIG. 10.

At this point, the user has been directed to the vendor of the item of interest. The user may then proceed to order the item by transacting with that vendor.

15 It is noted that often items are only available for certain prices for a set period of time. After the set period of time, the offer "expires." The present invention provides for notification of this expiration via the already-delivered newsletter.

Screen display 800a' as shown in FIG. 11, represents a later version of the screen display of the newsletter previously discussed in FIG. 8A. As can be seen, one of the items has expired, represented by a link 806'. As discussed above, a hyperlink is used to 20 point to the URL of the information displayed for hyperlink 806. As a result, the base reference, i.e., the content of the document or web page that the hyperlink points to can change.

The hyperlink (URL) embedded in the newsletter does not change, i.e., it is pointing to the same location, however, the content at that location has changed. 25 Consequently, at a time subsequent to the first time the recipient views the newsletter he or she will see different information. Specifically, the information at the URL target location can be updated and provided to the recipient without having to send another newsletter. As a result, in the particular example shown in Fig. 11, a user who views the newsletter some time after it has been initially received will be notified that the item is 30 no longer available at that price.

If a user clicks on the “expired” link, he or she may be directed to an explanatory screen 1200, as shown in FIG. 12. A section 1202 then explains that the selected items is no longer available.

The present invention provides a system and method that allows a user to define
5 the types of products that the user may be interested in purchasing, the relative level of
interest in each category and the types of products. This information is stored and
regularly compared to information regarding products that are available. By comparing
the user’s preferences to the products that are available, a more targeted list of products
may be provided to the individual. With this system, the individual will receive
10 information regarding products that he or she is more likely to be interested in and,
therefore, more likely to purchase. Advantageously, the user is not barraged with
information regarding products in which he or she has very little or no interest.
Advantageously for a seller, those potential buyers who have already expressed an
15 interest in a particular product will be receiving information about the products and the
advertising or information about the products is targeted to buyers who are more likely to
make a purchase.

Of course, the profile and database containing the product information may be
resident on a system separate from, but linked to, the server system 109. Specifically,
the mail server and the database used to prepare and send the newsletter may be a
20 machine separate from a web server that services the web site. The newsletter generating
system, in one example, is a dual-processor machine with two 700 MHz Pentium III
processors and 512 megabytes of RAM. The system uses the Red Hat Linux operating
systems and the MySQL database. Of course, these particular components could be
substituted with known equivalents.

25 The present invention scales up very efficiently for when large numbers of
newsletters must be prepared and delivered. In operation, the present invention achieves
a throughput rate of approximately 150,000 e-mail newsletters delivered each hour on a
single double-processor machine. This compares very favorably with a maximum
throughput of not more than 10,000 e-mails on the same single double-processor system
30 using the conventional prepare/store/send/delete methodology.

Further, additional information may be provided to the recipient of the newsletter
by modifying the content of target of one of the links embedded in the newsletter. In this

manner, the individual is updated without the necessity of sending an additional newsletter. Advantageously, this aspect of the present invention overcomes the disadvantages of a "static" e-mail message that cannot be modified without sending a new e-mail message some time after the first e-mail message.

5 While one example of the present invention involves a preparation of a newsletter describing items for sale that may be of interest to an individual, it is certainly clear to one of ordinary skill in the art that the present invention is not limited to the subject matter of items for sale but can provide any type of mass individualized message preparation.

10 Unless specifically stated herein, it should not be assumed that any described particular aspect or element of the system is essential. Further, variations, modifications, and other implementations of what is described herein will occur to those of ordinary skill in the art without departing from the spirit and the scope of the invention as claimed. In addition, in view of the foregoing description, one of ordinary skill in the art 15 will understand that equivalent structures may be available to achieve the same results as those described above. Accordingly, the spirit and scope of the following claims should not be limited to the descriptions of the examples described herein.

What is claimed is:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 229 230 231 232 233 234 235 236 237 238 239 239 240 241 242 243 244 245 246 247 248 249 249 250 251 252 253 254 255 256 257 258 259 259 260 261 262 263 264 265 266 267 268 269 269 270 271 272 273 274 275 276 277 278 279 279 280 281 282 283 284 285 286 287 288 289 289 290 291 292 293 294 295 296 297 298 299 299 300 301 302 303 304 305 306 307 308 309 309 310 311 312 313 314 315 316 317 318 319 319 320 321 322 323 324 325 326 327 328 329 329 330 331 332 333 334 335 336 337 338 339 339 340 341 342 343 344 345 346 347 348 349 349 350 351 352 353 354 355 356 357 358 359 359 360 361 362 363 364 365 366 367 368 369 369 370 371 372 373 374 375 376 377 378 379 379 380 381 382 383 384 385 386 387 388 389 389 390 391 392 393 394 395 396 397 398 399 399 400 401 402 403 404 405 406 407 408 409 409 410 411 412 413 414 415 416 417 418 419 419 420 421 422 423 424 425 426 427 428 429 429 430 431 432 433 434 435 436 437 438 439 439 440 441 442 443 444 445 446 447 448 449 449 450 451 452 453 454 455 456 457 458 459 459 460 461 462 463 464 465 466 467 468 469 469 470 471 472 473 474 475 476 477 478 479 479 480 481 482 483 484 485 486 487 488 489 489 490 491 492 493 494 495 496 497 498 498 499 500 501 502 503 504 505 506 507 508 509 509 510 511 512 513 514 515 516 517 518 519 519 520 521 522 523 524 525 526 527 528 529 529 530 531 532 533 534 535 536 537 538 539 539 540 541 542 543 544 545 546 547 548 549 549 550 551 552 553 554 555 556 557 558 559 559 560 561 562 563 564 565 566 567 568 569 569 570 571 572 573 574 575 576 577 578 579 579 580 581 582 583 584 585 586 587 588 589 589 590 591 592 593 594 595 596 597 597 598 599 599 600 601 602 603 604 605 606 607 608 609 609 610 611 612 613 614 615 616 617 618 619 619 620 621 622 623 624 625 626 627 628 629 629 630 631 632 633 634 635 636 637 638 639 639 640 641 642 643 644 645 646 647 648 649 649 650 651 652 653 654 655 656 657 658 659 659 660 661 662 663 664 665 666 667 668 669 669 670 671 672 673 674 675 676 677 678 679 679 680 681 682 683 684 685 686 687 688 689 689 690 691 692 693 694 695 696 697 697 698 699 699 700 701 702 703 704 705 706 707 708 709 709 710 711 712 713 714 715 716 717 718 719 719 720 721 722 723 724 725 726 727 728 729 729 730 731 732 733 734 735 736 737 738 739 739 740 741 742 743 744 745 746 747 748 749 749 750 751 752 753 754 755 756 757 758 759 759 760 761 762 763 764 765 766 767 768 769 769 770 771 772 773 774 775 776 777 778 779 779 780 781 782 783 784 785 786 787 788 789 789 790 791 792 793 794 795 796 797 797 798 799 799 800 801 802 803 804 805 806 807 808 809 809 810 811 812 813 814 815 816 817 818 819 819 820 821 822 823 824 825 826 827 828 829 829 830 831 832 833 834 835 836 837 838 839 839 840 841 842 843 844 845 846 847 848 849 849 850 851 852 853 854 855 856 857 858 859 859 860 861 862 863 864 865 866 867 868 869 869 870 871 872 873 874 875 876 877 878 879 879 880 881 882 883 884 885 886 887 888 889 889 890 891 892 893 894 895 896 897 897 898 899 899 900 901 902 903 904 905 906 907 908 909 909 910 911 912 913 914 915 916 917 918 919 919 920 921 922 923 924 925 926 927 928 929 929 930 931 932 933 934 935 936 937 938 939 939 940 941 942 943 944 945 946 947 948 949 949 950 951 952 953 954 955 956 957 958 959 959 960 961 962 963 964 965 966 967 968 969 969 970 971 972 973 974 975 976 977 978 979 979 980 981 982 983 984 985 986 987 988 989 989 990 991 992 993 994 995 996 997 997 998 999 999 1000 1000

CLAIMS

1. A computer-implemented method of providing information regarding one or more items for sale to a user, the method comprising:

- 5 (a) comparing a user's stored profile data to data regarding a plurality of items;
- (b) identifying one or more items of interest to the user from the plurality of items according to the user's stored profile data;
- (c) organizing the identified one or more items of interest according to the user's stored profile data;
- 10 (d) formatting a document representing the identified one or more items of interest as organized in step (c); and
- (e) providing the formatted document to the user.

2. The computer-implemented method of claim 1, wherein step (d)

15 comprises:

providing one or more hyperlinks directing the user to additional information for a respective one of the one or more identified items of interest.

3. The computer-implemented method of claim 1, wherein step (e)

20 comprises sending the formatted document to the user through a computer network.

4. The computer-implemented method of claim 1, wherein step (e) comprises sending the formatted document as an e-mail message.

25 5. The computer-implemented method of claim 4, further comprising: sending the e-mail message via a computer network.

6. The computer-implemented method of claim 1, wherein step (c) comprises:

30 ordering the identified one or more items of interest in an order from highest interest to lowest interest as a function of the user's stored profile data.

7. The computer-implemented method of claim 6, wherein step (d) comprises:

placing a predetermined number of the one or more items with the highest interest in a top portion of the formatted document.

5

8. The computer-implemented method of claim 7, wherein step (d) further comprises:

grouping the one or more items not in the predetermined number of items placed in the top portion of the formatted document by categories; and

10

ordering the categories from highest interest to lowest interest as a function of the user's stored profile data.

9. The computer-implemented method of claim 7, wherein step (d) comprises:

15 providing a hyperlink and image for each respective item of the predetermined number of items placed in the top portion of the formatted document.

20

10. The computer-implemented method of claim 9, wherein the formatted document is an HTML document.

11. The computer-implemented method of claim 10, wherein the predetermined number is not greater than three.

25

12. A method of providing information regarding one or more items for sale to a user, the method comprising:

under control of a client system:

(a) displaying preference information to be selected by the user; and

(b) upon completion of preference selection by the user, sending the

30

selected preference information to a first server system;

under control of the first server system:

(c) receiving the selected preference information;

- (d) storing the selected preference information;
- (e) comparing the selected preference information to data representing one or more items available for purchase and determining one or more items of interest to the user; and
- 5 (f) sending information regarding the identified one or more items of interest to the client system.

13. The method of claim 12, wherein the client system and the server system communicate with one another via a computer network.

10 14. The method of claim 12, wherein step (f) comprises:

under control of the first server system:

- (g) formatting a document to include information regarding the determined one or more items of interest and sending the formatted document to the client system.

15 15. The method of claim 14, wherein the formatted document comprises a hyperlink for each respective one or more items of interest.

20 16. The method of claim 15, wherein each hyperlink is directed to a second server system different from the first server system.

17. The method of claim 16, wherein each hyperlink is directed to information on the first server system.

25 18. The method of claim 12, further comprising:

under control of the first server system:

- (g) ordering the determined one or more items of interest in an order from highest interest to lowest interest as a function of the user's stored selected preference information.

30 19. The method of claim 18, wherein step (f) comprises:

under control of the first server system:

(h) formatting a document to include information regarding the determined one or more items of interest in the order established in step (g) and sending the formatted document to the client system.

5

20. The method of claim 19, wherein step (h) comprises:

(i) inserting a hyperlink for each respective one or more items of interest in the formatted document,

10 wherein each hyperlink points to additional information about the respective one or more items of interest.

21. The method of claim 20, wherein step (h) further comprises:

(j) placing the hyperlink for a predetermined number of the one or more items of interest in a top portion of the formatted document.

15

22. The method of claim 21, wherein step (j) comprises:

(k) providing a graphic image in the respective hyperlink of the predetermined number of one or more items of interest placed in the top portion of the formatted document.

20

23. A server system for providing information to a user regarding one or more items for sale, the server system comprising:

25 a first data storage device storing item information on each item of a plurality of items for sale;

a receiving component for receiving user purchase preference data from a client system;

30 a second data storage device for storing the received user purchase preference data;

a list generating component for comparing, for each respective user, the respective user purchase preference data to the stored item information to generate a list of one or more items for sale that may be of interest to the respective user; and

PCT/US2014/043250

a transmission component for transmitting the generated list to the respective user on the client system.

24. The server system as recited in claim 23, further comprising:

5 a formatting component to order the list of one or more items and to format the ordered list in a document.

25. The server system as recited in claim 24, wherein the transmission component transmits the document as an e-mail sent via a computer network.

10 26. The server system as recited in claim 25, wherein the document is an HTML document.

15 27. The server system as recited in claim 24, wherein the formatting component comprises:

a linking component for adding a hyperlink to the document for each respective item in the list.

28. A computer program product comprising:

20 a computer-readable medium;

computer program instructions, wherein the computer program instructions, when executed by a computer, direct the computer to perform a method of providing information to a user regarding one or more items for sale, the method comprising:

25 (a) comparing a user's stored profile data to data regarding a plurality of items;

(b) identifying one or more items of interest to the user from the plurality of items according to the user's stored profile data;

(c) organizing the identified one or more items of interest according to the user's stored profile data;

30 (d) formatting a document representing the identified one or more items of interest as organized in step (c); and

095514-0001-0000-0000-000000000000

(e) providing the formatted document to the user.

29. The computer program product of claim 28, wherein step (e) of the method comprises sending the formatted document to the user through a computer network.

30. The computer program product of claim 28, wherein step (d) of the method comprises:

10 providing one or more hyperlinks directing the user to additional information for a respective one of the one or more identified items of interest.

31. The computer program product of claim 28, wherein step (c) of the method comprises:

15 ordering the identified one or more items of interest in an order from highest interest to lowest interest as a function of the user's stored profile data.

32. The computer program product of claim 31, wherein step (d) of the method comprises:

20 placing a predetermined number of the one or more items with the highest interest in a top portion of the formatted document.

33. The computer program product of claim 32, wherein step (d) of the method comprises:

25 providing a hyperlink and image for each respective item of the predetermined number of items placed in the top portion of the formatted document.

34. A computer-implemented method of preparing and sending an electronic newsletter message prepared for each individual of a plurality of individuals, the method comprising:

30 retrieving a profile associated with a first individual;

identifying a newsletter template in the retrieved profile, said newsletter template having one or more variable fields each to be provided with data as a function of information in the retrieved profile;

5 identifying an e-mail address in the retrieved profile;

establishing a connection with a mail server associated with the identified e-mail address;

10 sending the newsletter template to the mail server, and, if, as the newsletter template is being sent to the mail server, a variable field is encountered, providing data for the variable field as a function of information in the retrieved profile and sending the provided data in the place of the variable field; and

15 continuing to send the newsletter template,

wherein the newsletter template with its one or more variable fields each completed with provided data is sent to the identified e-mail address; and

15 continuing no version of the newsletter template with one or more variable fields completed is stored other than on the mail server.

35. The computer-implemented method of claim 34, wherein the newsletter template is an HTML document.

20 36. The computer-implemented method of claim 34, wherein the newsletter template is a text document.

37. The computer-implemented method of claim 34, wherein at least one of the variable fields in the newsletter template is provided with data that is a Uniform Resource Locator (URL) link.

38. A system for preparing and sending an electronic newsletter message prepared for each individual of a plurality of individuals, the system comprising:

30 means for retrieving a profile associated with a first individual;

means for identifying a newsletter template in the retrieved profile, said newsletter template having one or more variable fields each to be provided with data as a function of information in the retrieved profile;

means for identifying an e-mail address in the retrieved profile;

means for establishing a connection with a mail server associated with the identified e-mail address;

means for sending the newsletter template to the mail server, and, if, as the newsletter template is being sent to the mail server, a variable field is encountered, providing data for the variable field as a function of information in the retrieved profile and sending the provided data in the place of the variable field; and

means for continuing to send the newsletter template,

wherein the newsletter template with its one or more variable fields each completed with provided data is sent to the identified e-mail address; and

wherein no version of the newsletter template with one or more variable fields completed is stored on the system other than on the mail server.

39. The system of claim 38, wherein the newsletter template is an HTML document.

40. The system of claim 38, wherein the newsletter template is a text document.

41. The system of claim 38, wherein at least one of the variable fields in the newsletter template is provided with data that is a Uniform Resource Locator (URL) link.

42. A computer program product comprising:

a computer-readable medium;

computer program instructions on the computer-readable medium, wherein the computer program instructions, when executed by a computer, direct the computer to

perform a method of preparing and sending an electronic newsletter message prepared for each individual of a plurality of individuals, the method comprising:

retrieving a profile associated with a first individual;

identifying a newsletter template in the retrieved profile, said newsletter

5 template having one or more variable fields each to be provided with data as a function of information in the retrieved profile;

identifying an e-mail address in the retrieved profile;

10 establishing a connection with a mail server associated with the identified e-mail address;

sending the newsletter template to the mail server, and, if, as the newsletter template is being sent to the mail server, a variable field is encountered, providing data for the variable field as a function of information in the retrieved profile and sending the provided data in the place of the variable field; and

15 continuing to send the newsletter template,

wherein the newsletter template with its one or more variable fields each completed with provided data is sent to the identified e-mail address; and

20 wherein no version of the newsletter template with one or more variable fields completed is stored other than on the mail server.

43. The computer program product of claim 42, wherein the newsletter template is an HTML document.

44. The computer program product of claim 42, wherein the newsletter

25 template is a text document.

45. The computer program product of claim 42, wherein at least one of the variable fields in the newsletter template is provided with data that is a Uniform Resource Locator (URL) link.

ABSTRACT

A system for providing an individual user with customized information is described. The user provides the system with the user's preferences. The system compares each user's preferences to a database to provide the user with notification via

5 an e-mail newsletter sent over a computer network. The newsletter is individually prepared for each user by dynamically populating the newsletter with the necessary information as the newsletter is being sent to the individual. Thus, there is no need to first prepare the newsletter, store it, send it, and delete it. This approach reduces the need for more equipment as the number of needed newsletters increases.

Appendix A

TEXT TEMPLATE

```
<!suspend_auto_output>
5  <!load_module path=/s/ehtml/tags.so>
<!load_module path=/s/ehtml/basic.so>
<!load_module path=/s/ehtml/control.so>
<!load_module path=/s/ehtml/function.so>
<!load_module path=/s/ehtml/web.so>
10 <!load_module path=/s/ehtml/dbmysql.so>
<!load_module path=/s/ehtml/bdogmisc.so>
<!load_module path=/s/ehtml/sem.so>
<!load_module path=/s/ehtml/date.so>
<!sem_op key=qmdb op=-1>
15 <if cond=<not_equal left=<ldbopen name=bargains host=192.168.0.100>
               right=>><!template_defer></if>
<resume_auto_output>From: BargainDog <comments@bargaindog.com>
To: <!var name=template_key>
Subject: Bargains from BargainDog!
20 <!suspend_auto_output>
<!-- Basic User Info -->
<!dbselect query='select id, first_name, len,
25   DATE_FORMAT(DATE_SUB(''<!var name=day>'', INTERVAL <!var
name=interval>
DAY), ''%Y%m%d''), 
   DATE_FORMAT(''<!var name=day>'', ''%M %d, %Y'')
   from users where email =
   <!dbliteral value=<!var name=template_key>>>
30 <!var name=uid value=<!dbfield num=1>>
<!var name=first_name value=<!dbfield num=2>>
<!var name=len value=<!dbfield num=3>>
<!var name=startday value=<!dbfield num=4>>
35 <!var name=nice_date value=<!dbfield num=5>>
</!dbselect>
<!-- The Query -->
40 <!var name=qry value='select bargain_cat.id,
   substring(min(concat((bargains.cat_id <> bargain_cat.cat),
               bargain_cat.cat)), 2),
   min((bargains.cat_id <> bargain_cat.cat)) as pri,
   count(*) as cnt, bargains.quality
   from bargains straight_join bargain_cat straight_join user_cat
   where
50   bargains.id = bargain_cat.id
   and bargain_cat.cat = user_cat.cat
   and user_cat.id = <!var name=uid>
   and bargains.start_date >= <!var name=startday>
   and bargains.start_date < <!var name=day>
   and bargains.cat_id > 0
55   and ((bargain_cat.bits1 = 0) or
   (user_cat.bits1 & bargain_cat.bits1))'
```

```
and ((bargain_cat.bits2 = 0) or
     (user_cat.bits2 & bargain_cat.bits2))
and ((bargain_cat.bits3 = 0) or
     (user_cat.bits3 & bargain_cat.bits3))
5      group by bargain_cat.id
      order by bargains.quality DESC, cnt DESC, bargains.id DESC>

10     <!resume_auto_output><if_else
cond=<equal left=<!var name=first_name>
right="">>>>Your</else><possess_word word=<!var name=first_name>></if_else>
BargainDog Newsletter - <!var name=nice_date>

15     -----
16     Top Bargains
17     -----
18
19     <!suspend_auto_output>

20     <!var name=list value="">
<!var name=c value=0>

21     <!dbselect var=r query='<!var name=qry> limit <!var name=len>'>
22
23     <if_else cond=<!less left=<!var name=c> right=3>>
24
25     <!var name=c value=<!plus <!var name=c> 1>>
<!dbselect query='select bargains.name, short_txt, merchants.name,
IF(strike<>\0.00',
30
31             concat('Originally $', strike, '),
32             ''),
33             IF(price<>\0.00', concat('$', price), 'Free!'),
34             bargains.id
35             from bargains, merchants where
36             bargains.id = <!dbfield num=1>
37             and bargains.mer_id = merchants.id'
38 ><!resume_auto_output><!dbfield num=1> - <!dbfield num=5> <!dbfield num=4>
39 <!dbfield num=2>
40 Merchant: <!dbfield num=3>
41 http://www.bargaindog.com/prod/?id=<!dbfield num=6>&uid=<!var name=uid>
42
43     <!suspend_auto_output></!dbselect>
44
45     </if_else>
46
47     <!dbselect query='select bargains.name, short_txt, merchants.name,
48     IF(strike<>\0.00',
49             concat('Originally $', strike, '),
50             ''),
51             IF(price<>\0.00', concat('$', price), 'Free!'),
52             bargains.id, <!dbfield num=2>
53             from bargains, merchants where
54             bargains.id = <!dbfield num=1>
55             and bargains.mer_id = merchants.id'>
56
57     <if cond=<!equal left=" right=<!var name=cat<!dbfield num=7>>>>
58
59     <!dbselect query='select name_full, id from categories where
```

id = <!dbfield num=7>'>

5 <!var name=cat<!dbfield num=2> value='>

 <!html_decode string='<!dbfield num=1>'>

 '>

10 <!var name=list value='<!var name=list<!var name=cat<!dbfield num=2>>'>

 <!dbselect>

 </if>

15 <!var name=cat<!dbfield num=7> value='<!var name=cat<!dbfield num=7>>'>

 <!dbfield num=1> - <!dbfield num=5> <!dbfield num=4>

 <!dbfield num=2>

 Merchant: <!dbfield num=3>

<http://www.bargaindog.com/prod/?id=<!dbfield num=6>&uid=<!var name=uid>>

20 </dbselect>

 </if_else>

 </dbselect>

25 -----

 <if cond=<!equal left=<!var name=r> right=0>><!template_fail></if>

 <resume_auto_output><dbselect query='select id, copy from newsads where run_date = <!var name=day> and format = 0'>

30 -----

 ADVERTISEMENT:

 <!var name=ad value=<!dbfield num=2>><call name=ad>

35 </dbselect><!sem_op key=qmdb op=1><dbclose><if cond=<!greater left=<!var name=r> right=3>>

 More Bargains From BargainDog:

 <call name=list></if>

40 -----

 Subscription Information

55 You are subscribed to this newsletter as "<!var name=template_key>".

 To change your preferences, customize your category selections,

 or unsubscribe from the newsletter, please go to

<http://www.bargaindog.com/members/>

 Disclaimer

55 This e-mail is meant for informational purposes only, and is not a guarantee

 that the products listed may be purchased at the above prices. Bargain

 Dog, its affiliated and non-affiliated merchants make no promises or

 guarantees about the price, quality or availability of products it lists in

this service. For a full description of Bargain Dog's terms and conditions, go to:
<http://www.bargaindog.com/static/terms.ehtml>

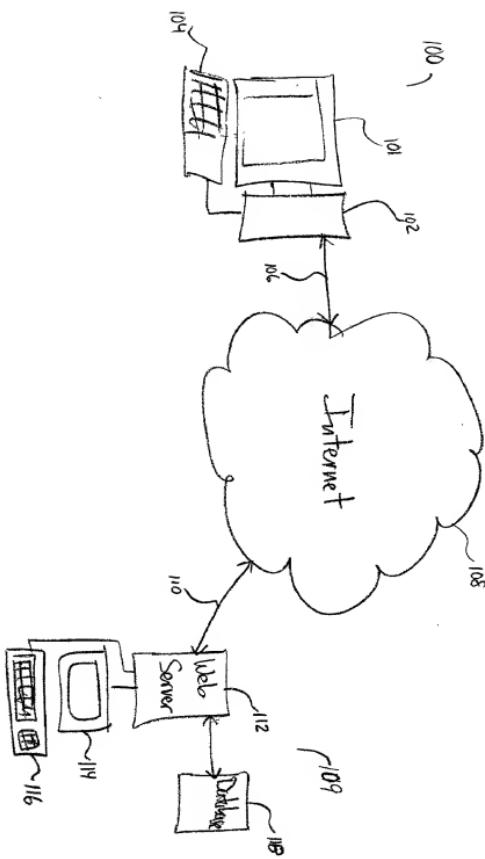


Fig. 1

http://www.bargaindog.com/

BargainDog

The Best Bargains From The Best Sites

Browse: All Bargains

Golf

How do you like our new design? Tell us!

Welcome to BargainDog!

BargainDog sends its members a free personalized e-mail newsletter keeping them updated on the best deals at the best shopping web sites.

Tell us what types of products interest you - everything from apparel to software. We'll then sniff out the best deals in those categories from hundreds of our affiliated shopping web sites and notify you wherever you want.

Register now and join the hundreds of thousands in the BargainDog community who will never miss out on a bargain again!

[Learn more about BargainDog.](#)

BargainDog
BargainDog
BargainDog
BargainDog
BargainDog

Top Bargains

Here are some of the best of BargainDog's most recent finds:



BargainDog
BargainDog
BargainDog
BargainDog
BargainDog

BargainDog
BargainDog
BargainDog
BargainDog
BargainDog

BargainDog
BargainDog
BargainDog
BargainDog
BargainDog

16.2

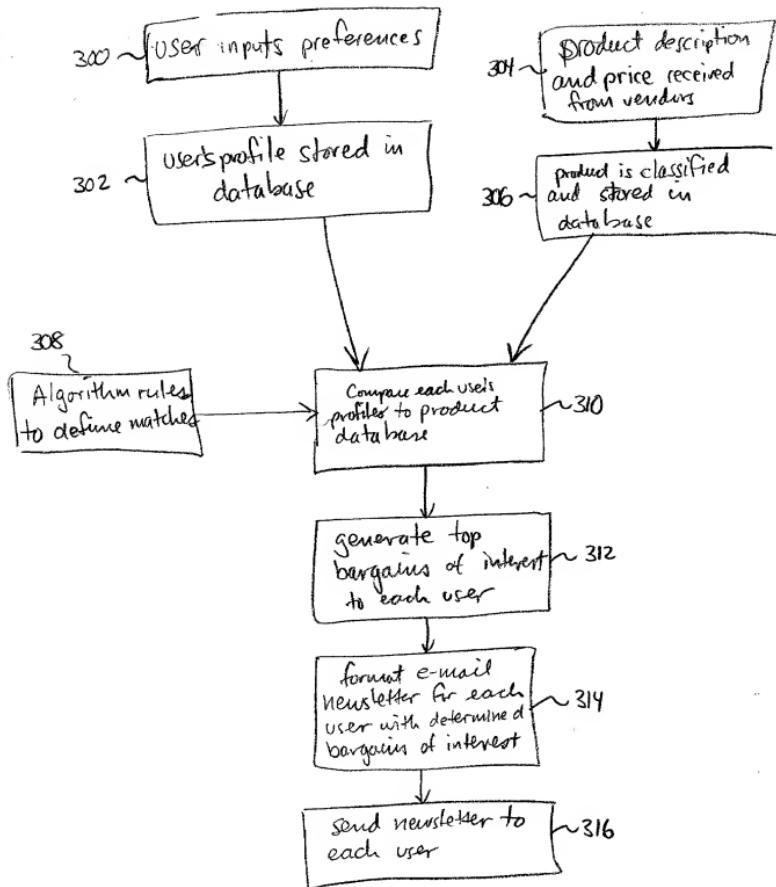


Fig. 3

Welcome

This page allows you to change your BargainDog newsletter preferences. After you confirm the information, press the submit button at the bottom of the page. You will then be able to edit your bargain preferences. To cancel your Bargain Dog newsletter, [click here to unsubscribe](#).

Subscriber Information:

Your First Name: ~402

Your E-mail Address: ~204

Confirm E-mail Address: ~402

~9. username@ol.com or 75.55.11@companyname.com
Please make sure it is not blocked as your newsletter will be sent to this e-mail address.

Your BargainDog Password: ~401

Confirm Password: ~406

BargainDog

[Home](#) | [Join Our Store](#) | [About Us](#) | [Press Releases](#) | [FAQs](#)

Member Services

[Browse:](#) [All Bargains](#) | [Members](#) | [Merchants](#)

[Get](#)

Your privacy please
and of course, my
privacy is important to me.

http://www.bargaindog.com/members/edit/

510

Newsletter Preferences:

In what format would you like your **BargainDog newsletter**? (I don't know. [Help me decide.](#))

502 HTML Enhanced (Outlook, Hotmail and other web-based e-mails)
504 Text Only (AOL, Eudora, Juno and other text-based e-mails)

506

How often would you like to receive your **BargainDog newsletter**?

500 Daily
506

How long would you like each of your newsletters?

510 Average (about 20 bargains)
512

Tell us about yourself:

BargainDog plans to add discounts at local stores, birthday promotions and specials for men and women. Sign up now so you don't miss out!

Your Zip Code: 02210 504
Your Birthday: January 1 1980 51c
Your Gender: Male Female 516
518

520

522

FIG. SA

File: BargainDog - Microsoft Internet Explorer

http://www.bargaindog.com/members/edit/

You are now a member of BargainDog.com
powered by RUS

Newsletter Preferences:

In what format would you like your BargainDog newsletter? (I don't know. Help me decide.)

HTML Enhanced (Outlook, Hotmail and other web-based e-mail(s))
 Text Only (AOL, Eudora, Juno and other text-based e-mail(s))

How often would you like to receive your BargainDog newsletter?

Daily

How long would you like each of your newsletters?

50 ~ Average (about 20 bargains) 512
 Short (about 10 bargains)
 Average (about 20 bargains)
 Long (about 30 bargains) 510a

Tell Us about yourself.

BargainDog plans to add discounts at local stores, birthday promotions and specials for men and women. Sign up now so you don't miss out!

Your Zip Code: 02210

Your Birthday: January 1, 1980

Your Gender: ♂ Male ♀ Female

500

http://www.bargaindog.com/members/edit/statistic

Your Shopping Preferences:

Please tell us how interested you are in receiving bargains in the following categories. We use your choices to generate a newsletter that is personalized just for you!

608 / 610 / 612 / 614 / 616 / 618

609 / 611 / 613 / 615 / 617

602 / 604 / 606 / 608

600 / 601 / 603 / 605

607 / 609 / 611 / 613

601 / 603 / 605 / 607

602 / 604 / 606 / 608

603 / 605 / 607 / 609

604 / 606 / 608 / 610

605 / 607 / 609 / 611

606 / 608 / 610 / 612

607 / 609 / 611 / 613

608 / 610 / 612 / 614

~620

~600

BargainDog: The Best Bargains From The Best Sites - Microsoft Internet Explorer	
http://www.bargaindog.com/members/left/match/	Forums
	Cart
	Search
	Logout
Category	Category
Business	Computing
Computing	Cooking & Food
Electronics	Electronics & Gadgets
Health	Health & Beauty
Hobbies	Hobbies
Home	Home & Garden
Movies	Movies
Music	Music
Pets	Pets
Sports	Sports
Tools & Video Games	Tools & Video Games

http://www.bargaindog.com/members/cust/

Welcome

The BargainDog newsletter is a monthly publication that highlights the best bargains from the best sites on the Internet. It is a great way to keep up with the latest deals and savings. Please continue customizing your BargainDog newsletter. Any changes you have made up until this point have been saved, so you may stop customizing at any time.

Customize Apparel & Accessories ~ 70c

Send me Apparel & Accessories bargains for the following people:

- Men ~ 70c
- Women ~ 70c
- Boys
- Girls
- Baby & Toddler Boys
- Baby & Toddler Girls ~ 70c
- Big & Tall Men
- Plus-size Women

Customize Career & Professional ~ 70c

Send me Career & Professional bargains for:

- Business Travel
- Home Office
- General Workplace ~ 70c

700

Member Services

Never tell your e-mail address to a stranger. If you do, you could end up getting spammed or worse. If you do not want to receive e-mail from us, click here to unsubscribe.

Send a gift certificate to a friend or family member. It's a great way to say "thank you" or "I'm sorry".

See BargainDog in the news. Check back often for the latest news and reviews.

BargainDog Will

never tell your e-mail address to a stranger. If you do, you could end up getting spammed or worse. If you do not want to receive e-mail from us, click here to unsubscribe.

Send a gift certificate to a friend or family member. It's a great way to say "thank you" or "I'm sorry".

See BargainDog in the news. Check back often for the latest news and reviews.

Customize Apparel & Accessories ~ 70c

Send me Apparel & Accessories bargains for the following people:

- Men ~ 70c
- Women ~ 70c
- Boys
- Girls
- Baby & Toddler Boys
- Baby & Toddler Girls ~ 70c
- Big & Tall Men
- Plus-size Women

Customize Career & Professional ~ 70c

Send me Career & Professional bargains for:

- Business Travel
- Home Office
- General Workplace ~ 70c

F16. 7

Business Unit: Email Marketing - Message: HTML

Be creative & Creative

Foxt & Snoon Feeding Set by Gerber ~~\$19.99~~ **\$12.97**
The Gerber Feeding Set, Trays, Baskets, Bowl, Utensil set. 50% off
Beating sale. Now 50% off

At Baby

Golds Gym Power Tower ~~\$99.99~~ **\$59.99**
Work your lower body muscle groups without the use of weights
with Golds Gym Power Tower. Now 40% off
At ShopSports.com

Sports & Leisure

Steve Wonder - At The Gates Of A Dream 4 CD Box Set ~~\$69.99~~ **\$35.99**
The At The Gates Of A Dream Box Set is the first of its kind to come to the store. Now 40% off
At Rock.com

Books & Magazines

John Grisham's The Brethren with Membership ~~\$27.95~~ **Free!**
Get John Grisham's latest, The Brethren, FREE with The Library Card! Plus, get 4 more books for only \$11
At The Library Card

Electronics & Gadgets

Garmin StreetPilot GPS System ~~\$599.99~~ **\$399.99**
Save over \$200 on the best in satellite tracking technology and

800b

Fig. 88

03558551.1 - 03558551.1

John Grisham's The Brethren with Membership

\$22.95 Free!

Get John Grisham's latest, *The Brethren*, FREE from The Literary Guild Plus, get 4 more books for only \$11

At The Literary Guild

Electronics & Gadgets

Garmin StreetPilot GPS System ~~\$635.99~~ **\$399.99**

Save over \$200 on the best in satellite tracking technology and detailed electronic maps! Never be lost again!

At TurboPrice.com

Career & Professional

Monthly Pocket Planner ~~\$16.95~~ **\$9.90**

This Monthly Pocket Planner is perfect for busy professionals who need to keep a tab on their appointments. Now 36% off!

At AtYourService.com

BargainDog Information

Subscription Information

You are subscribed to this newsletter as "psarkin@wsgisw.com". To change your preferences, customize our category selections, or unsubscribe from the newsletter, please go to [Our Mailing Lists Page](#).

Disclaimer
This e-mail is meant for informational purposes only, and is not a guarantee that the products listed may be purchased at the above prices. BargainDog, its affiliated and non-affiliated merchants make no promises or guarantees about the price, quality and availability of products it lists in this service. For a full description of BargainDog's policies, see our [Terms and Conditions](#).

~800c

Print.com The Internet iPrint Shop (Make a Business Card, Letterhead, Envelope, Label, Sticker - Microsoft Internet Explorer)

http://www.iprint.com/cgi-bin/showinfo.cgi?adid=31242012&adid=4768101=&shape=121&tempromo3d1

Design Online • Safe & Secure • Professional Printing • FREE • \$0.99 Value • 100% Satisfaction Guaranteed!

free address labels!

Special Offer from iPrint.com

How to Get it

click here

What's the Catch?

Still have questions?

You must be a new customer and pay for shipping (as low as \$1.45 for U.S. addresses).

Retail value \$9.99 includes 300 free self-adhesive labels and a dispenser. Your \$0.00 balance will appear when you reach the shopping cart.

We're just labels!

Create, proof, and order business cards, photo mousepads, personalized Post-it® Notes, rubber stamps and more at www.iprint.com

Email us at Customer_Support@iPrint.com

*Terms and Conditions: Offer valid for new customers only; one per person, household, address, email or phone number. Offer excludes the cost of shipping. Must use valid email address. Please allow 6-8 weeks for delivery. While supplies last.

iprint.com

13595541 • 85634383

✉ Bargains from BargainDog - Message (HTML)

802 Paul's BargainDog Newsletter - February 18, 2000



803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

833

834

835

836

837

838

839

840

841

842

843

844

845

846

847

848

849

850

851

852

853

854

855

856

857

858

859

860

861

862

863

864

865

866

867

868

869

870

871

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

895

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

915

916

917

918

919

920

921

922

923

924

925

926

927

928

929

930

931

932

933

934

935

936

937

938

939

940

941

942

943

944

945

946

947

948

949

950

951

952

953

954

955

956

957

958

959

960

961

962

963

964

965

966

967

968

969

970

971

972

973

974

975

976

977

978

979

980

981

982

983

984

985

986

987

988

989

990

991

992

993

994

995

996

997

998

999

1000

More Bargains From BargainDog:

Apparel & Accessories

14-Karat Gold Earrings - Teddy Bears **\$29.37** **\$12.79**
These beautiful 14-karat gold earrings in a variety of styles,
including these cute teddy bears, are now up to 60% off.

At saleoutlet.com

~808

980a'

980b'

980c'

980d'

980e'

980f'

980g'

980h'

980i'

980j'

980k'

980l'

980m'

980n'

980o'

980p'

980q'

980r'

980s'

980t'

980u'

980v'

980w'

980x'

980y'

980z'

981a'

981b'

981c'

981d'

981e'

981f'

981g'

981h'

981i'

981j'

981k'

981l'

981m'

981n'

981o'

981p'

981q'

981r'

981s'

981t'

981u'

981v'

981w'

981x'

981y'

981z'

982a'

982b'

982c'

982d'

982e'

982f'

982g'

982h'

982i'

982j'

982k'

982l'

982m'

982n'

982o'

982p'

982q'

982r'

982s'

982t'

982u'

982v'

982w'

982x'

982y'

982z'

983a'

983b'

983c'

983d'

983e'

983f'

983g'

983h'

983i'

983j'

983k'

983l'

983m'

983n'

983o'

983p'

983q'

983r'

983s'

983t'

983u'

983v'

983w'

983x'

983y'

983z'

984a'

984b'

984c'

984d'

984e'

984f'

984g'

984h'

984i'

984j'

984k'

984l'

984m'

984n'

984o'

984p'

984q'

984r'

984s'

984t'

984u'

984v'

984w'

984x'

984y'

984z'

http://www.bargandog.com/prod/prod-3467&id=470810

Welcome

Registration

BargainDog is a new online store that offers a variety of products at great prices. We offer a wide range of products, including apparel, accessories, books, magazines, career & professional items, computing, cooking & food, electronics & gadgets, health & beauty, hobbies, and more. Our goal is to provide you with the best deals possible, and we are constantly updating our inventory to reflect the latest trends and offerings.

Looking for

All Bargains >

Browse other bargains:

We're sorry, but the bargain you selected (Chocolate Heart with Card Purchase) is no longer available. Many of the products we feature are limited-time offers, and merchants often discontinue the promotion or run out of stock.

Your Product Selection

Top Bargains

PGA Tour Golf Volumes 1-3 - VHS
\$10 Off Your First Purchase
Org. \$49.99 Now Free!

Free

Green Reflective Bandana with ANY Purchase
Org. \$10.95 Now Free!

London Symphony Orchestra - Beatles or Rolling
~1200

Apparel & Accessories

- Books & Magazines
- Career & Professional
- Computing
- Cooking & Food
- Electronics & Gadgets
- Health & Beauty
- Hobbies

If you have any questions or comments, please e-mail us at comments@bargandog.com

Fig. 12

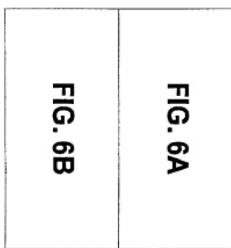


FIG. 6

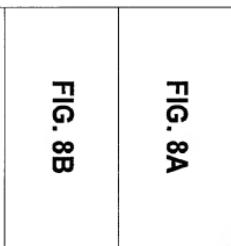


FIG. 6A

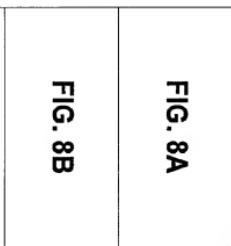


FIG. 6B

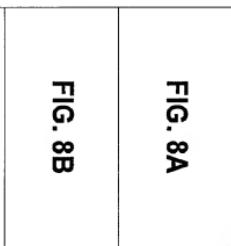


FIG. 6C

FIG. 8

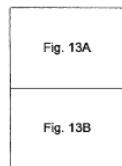


Fig. 13

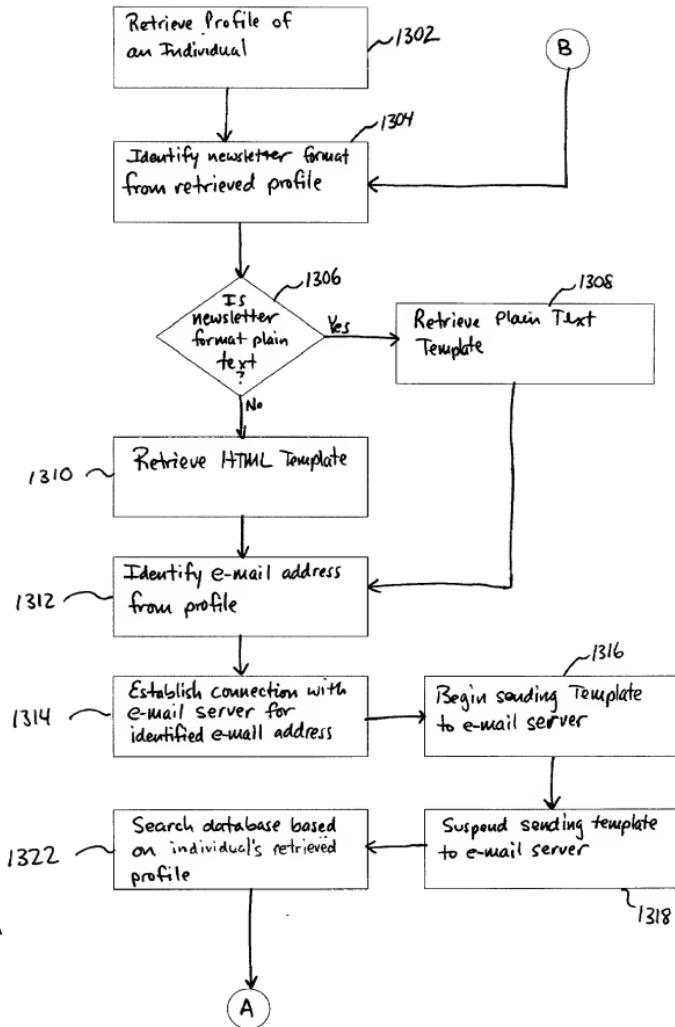


FIG. 13A

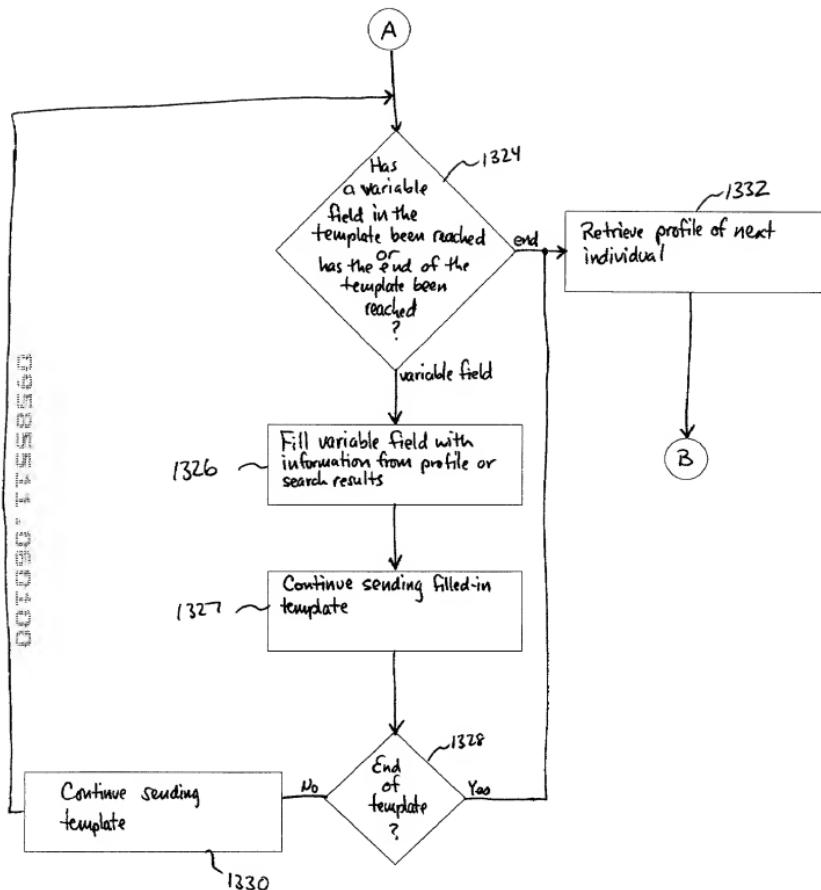


FIG. 13B

HTML Template

```
<!suspend_auto_output>
<load_module path=/s/ehtml/tags.so>
<load_module path=/s/ehtml/basic.so>
<load_module path=/s/ehtml/control.so>
<load_module path=/s/ehtml/function.so>
<load_module path=/s/ehtml/dbmysql.so>
<load_module path=/s/ehtml/dbogmisc.so>
<load_module path=/s/ehtml/sem.so>
<resume_auto_output>From: BargainDog <comments@bargaindog.com>
To: <var name=template_key>
Subject: Bargains from BargainDog!
```

1402

```
MIME-Version: 1.0
Content-Type: text/html; charset="us-ascii"
Content-Disposition: inline; filename="bargaindog.html"
```

```
lsem_op key=qmrb op=-1<if cond=<not_equal left=<ldbopen name=bargains
host=192.168.0.100 right=>><template_defer></if>
```

```
<html><head>
<title>Bargains from BargainDog!</title></head>
<body bcolor="#FFFFFF">
```

```
<!-- If you are reading this message, then the newsletter format
you have selected cannot be understood by your e-mail program.
```

```
Please go to the Bargain Dog members page at
http://www.bargaindog.com/members/
and switch your newsletter to the text-only format. -->
```

```
<table border=0 cellpadding=5 cellspacing=0 width=468>
<tr><td colspan=3 align="center">
<a href="http://www.bargaindog.com"></a>
</td></tr>
```

```
<!--suspend_auto_output>
<!-- Basic User Info -->
<ldbselect query='select id, first_name, len,
DATE_FORMAT(DATE_SUB(`<var name=day>`, INTERVAL <var
name=interval>
DAY, 1%Y%m%d`), DATE_FORMAT(`<var name=day>`, '%M %d, %Y')
from users where email =
<!dbliteral value=<var name=template_key>>'>
```

```
<var name=uid value=<!dbfield num=1>>
<var name=first_name value=<!dbfield num=2>>
<var name=len value=<!dbfield num=3>>
<var name=startday value=<!dbfield num=4>>
<var name=nice_date value=<!dbfield num=5>>
</ldbselect>
```

```
<!-- The Query --> ~ 1406
```

1400

Fig. 14A

Fig. 14B

Fig. 14C

Fig. 14D

Fig. 14E

Fig. 14

Fig. 14A

```

<!var name=qry value='select bargain_cat.id,
substring(min(concat((bargains.cat_id <> bargain_cat.cat),
bargain_cat.cat)), 2),
min((bargains.cat_id <> bargain_cat.cat)) as pri,
count(*) as cnt, bargains.quality

from bargains straight_join bargain_cat straight_join user_cat
where
    bargain_cat.id = bargain_cat.id
    and bargain_cat.cat = user_cat.cat
    and user_cat.id = <!var name=uid>
    and bargains.start_date >= <!var name=startday>
    and bargains.start_date < <!var name=day>
    and bargains.cat_id > 0

    and ((bargain_cat.bits1 = 0) or
    (user_cat.bits1 & bargain_cat.bits1))
    and ((bargain_cat.bits2 = 0) or
    (user_cat.bits2 & bargain_cat.bits2))
    and ((bargain_cat.bits3 = 0) or
    (user_cat.bits3 & bargain_cat.bits3))

group by bargain_cat.id
order by bargains.quality DESC, cnt DESC, bargains.id DESC>  ↗ 1408

<!var name=row1 value='<tr>'>
<!var name=row2 value='<tr>'>
<!var name=row3 value='<tr>'>

<!var name=list value="">
<!var name=c value=0>

<!dbselect var=r query='<!var name=qry> limit <!var name=len>'>
<if_else cond=<less left=<!var name=c> right=3>>

<!var name=c value=<!plus <!var name=c> 1>>

<!var name=row1
value='<!var name=row1><td width=33% valign="bottom" align="center">
<a target=_blank href="http://www.bargaindog.com/prod/?id=<!dbfield
num=1>&uid=<!var name=uid>"></td>'>
<!dbselect query='select bargains.name, short_txt, merchants.name,
IF(strike<>\0.00\',
concat(''<s>\$'', strike, ''</s>&nbsp;&nbsp;''),
''),
IF(price<>\0.00\',
concat(''$'', price), 'Free!'),
bargains.id
from bargains, merchants where
bargains.id = <!dbfield num=1>
and bargains.mer_id = merchants.id>

<!var name=row2 value='<!var name=row2><td width=33% valign="top">

```

FIG. 14.B

```

align="center">
    <table border=0 cellspacing=0 cellpadding=2 bgcolor="yellow">
        <tr><td>
            <nobr>
<font face="arial,helvetica" size=-1 color="#000066"><b><!dbfield num=4>
<font color="#AA3333"><!dbfield num=5></b></font>
</td></tr></table></td>>
</var name=row3 value=<!var name=row3><td width=33% valign="top"
align="center">
<a target=_blank href="http://www.bargaindog.com/prod/?id=<!dbfield
num=6>&uid=<!var name=uid>"><font face="arial,helvetica" size=-1
color="#000066"><b><!dbfield num=1></b></font></a><br><font
face="arial,helvetica" color="#000066" size=-2>
<!dbfield num=2><br><font color="#AA3333"><b>At
<!dbfield num=3></b><br></font></td>>
</!dbselect>

</else>
<!dbselect query='select bargains.name, short_txt, merchants.name,
    IF(strike<>\0.00',
                concat('\'<s>\$\' , strike, '\</s>&nbsp;&nbsp;\'),
                ''),
    IF(price<>\0.00, concat('\'$\' , price), 'Free!'),
                bargains.id, <!dbfield num=2>
    from bargains, merchants where
        bargains.id = <!dbfield num=1>
        and bargains.mer_id = merchants.id'>
<!if_else cond=<!equal left=" right=<!var name=cat<!dbfield num=7>>>
    <!dbselect query='select name_full, id from categories where
        id = <!dbfield num=7>'>
        <!var name=cat<!dbfield num=2> value=<tr><td colspan=3 align=center>
            <table width=100% border=0 cellspacing=0 cellpadding=0
                bgcolor="#000066"><tr><td align="center" width=100%
                    <font face="arial,helvetica" size=-1 color="#FFFFFF">
                    <nobr><b><!dbfield num=1></b></nobr>
                </font>
            </td></tr></table></td></tr>
            <tr><td colspan=3 align=center>
                <!var name=list value='<!var name=list><!var name=cat<!dbfield
num=2>></td></tr>'>
                </!dbselect>
            </!else>
            <!var name=cat<!dbfield num=7> value='<!var name=cat<!dbfield num=7>><br>'>
            <!if_else>
            <!var name=cat<!dbfield num=7> value='<!var name=cat<!dbfield num=7>>

```

Fig. 14C

```

<a target=_blank href="http://www.bargaindog.com/prod/?id=<ldbfield
num=6>&uid=<ivar name=uid">
<font face="arial,helvetica" size=-1 color="#000066">
<b><ldbfield num=1></b></font><a> &nbsp;<font face="arial,helvetica"
color="#000066" size=-1><b><ldbfield num=4><font
color="#AA3333"><ldbfield num=5></b><br></font>
<ldbfield num=2>
<br><font color="#AA3333"><b>At <ldbfield num=3></b><br></font></font>'>

</ldbselect>
</if_else>
</ldbselect>
<if cond=<lequal left=<ivar name=r right=0>><itemplate_fail></if>
<ivar name=row1 value='<ivar name=row1></tr>'>
<ivar name=row2 value='<ivar name=row2></tr>'>
<ivar name=row3 value='<ivar name=row3></tr>'>

<resume_auto_output>

<tr><td colspan=3 align="center">
<font face="arial,helvetica" size=-1 color="#AA3333">
<b><nobr><if_else cond=<lequal left=<ivar name=first_name>
right="">Your</if><!/possess_word word=<ivar name=first_name>></if_else>
BargainDog Newsletter - <ivar name=nice_date></nobr></b></font></td></tr>

<ivar name=row1>
<ivar name=row2>
<ivar name=row3>

<ldbselect query='select id, copy from newsads where
run_date = <ivar name=day> and format = 1'>
<ivar name=ad value=<ldbfield num=2>>
<tr><td colspan=3 align="center">
<hr color="#000066" size=1 noshade>
<font size=-2 color="#AA3333" face="arial,helvetica">
A D V E R T I S E M E N T
<br>
<call name=ad>
<br>
<hr color="#000066" size=1 noshade>
</td></tr>
</ldbselect><!sem_op key=qmdb op=1><ldbclose>

<if cond=<greater left=<ivar name=r right=3>><tr><td colspan=3
align=center>
<font face="arial,helvetica" size=-1 color="#AA3333">
<b><nobr>More Bargains From BargainDog:</nobr></b></font>
</td></tr><call name=list></if>

<tr><td colspan=3 align=center>
<table width=100% border=0 cellspacing=0 cellpadding=0
bgcolor="#000066"><tr><td align="center" width=100%>
<font face="arial,helvetica" size=-1 color="#FFFFFF">

```

FIG. 14D

<nobr>BargainDog Information</nobr>

</td></tr></table>
</td></tr>

<tr><td colspan=3 align="left">

Subscription Information

You are subscribed to this newsletter as "<!var name=template_key>".

To change your preferences, customize your category selections, or
unsubscribe from the newsletter, please
go to Our Members
Page.

Disclaimer

This e-mail is meant for informational purposes only, and is not a guarantee
that the products listed may be purchased at the above prices. BargainDog,
its affiliated and non-affiliated merchants make no promises or
guarantees about the price, quality or availability of products it lists in
this service. For a full description of BargainDog's policies, see our
terms
and
conditions.

</td></tr>
</table>

</body></html>

© 1999 - 2000 Sombasa Media, Inc. All Rights Reserved.

FIG. 14E

From: BargainDog [comments@bargaindog.com]
Sent: Wednesday, May 24, 2000 12:00 AM
To: psorkin@wgslaw.com
Subject: Bargains from BargainDog!

BargainDog

Paul's BargainDog Newsletter - May 24, 2000



Free!

1502



\$34.95 \$14.95

Expedia Streets Deluxe & Trip Planner 2000

Get address, business routine, detailed driving directions, and trip-planning all in one with Expedia Streets & Trips 2000. 57% off! \$20 rebate! At SoftwareBuyLine



\$34.99 \$16.99

Kideo Animated

"And the Ocean goes to..." Now you can make that dream come true with a personalized video from Kideo. Now 51% off! At EToys

1506

The Resurrected & Grave Indiscretion - VHS

Now watch the fun in Grave Indiscretion or be horrified by The Resurrected for \$4.95 each for shipping! At FreeStuffThisWeek.com

More Bargains From BargainDog:

Career & Professional

Sports Ball Mousepads \$42.95 \$4.00

Give your favorite sports fan a treat with their very own personalized mouse pad. Now 69% off! At Personal Creations

Electronics & Gadgets

Midland 75-507 14-Channel Family Radio (Single)

\$79.95 \$19.99

This tiny, inexpensive 2-way radio packs just enough features for the casual user to make it a terrific deal. Now 75% off! At Amazon.com

~ 1508

Movies

Two Free Blockbuster Movie Rentals with \$25 Purchase

Free!

Now at PetsMart.com, spend \$25 and receive a Blockbuster Movie Card good for 2 FREE movie rentals! At PetsMart.com

~ 1510

Apparel & Accessories

Men's Golfer Silk Tie \$26.00 \$19.00

This classic Renato Balestra Italian silk tie will make a winning impression on your next interview or date! Now save 37%! At tiemaster.com

~ 1512

BargainDog Information

~ 1514

F6. 15

Subscription Information

You are subscribed to this newsletter as "psorkin@wgslaw.com". To change your preferences, customize your category selections, or unsubscribe from the newsletter, please go to [Our Members Page](#).

Disclaimer

This e-mail is meant for informational purposes only, and is not a guarantee that the products listed may be purchased at the above prices. BargainDog, its affiliated and non-affiliated merchants make no promises or guarantees about the price, quality or availability of products it lists in this service. For a full description of BargainDog's policies, see our [terms and conditions](#).

<META HTTP-EQUIV="Content-Type" CONTENT="text/html; charset=iso-8859-1">

<META HTTP-EQUIV="Content-Type" CONTENT="text/html; charset=iso-8859-1">

<title>Bargains from BargainDog!</title></head>
<body bgcolor="#FFFFFF">

<!-- If you are reading this message, then the newsletter format
you have selected cannot be understood by your e-mail program.

Please go to the Bargain Dog members page at
<http://www.bargaindog.com/members/>
and switch your newsletter to the text-only format. -->

<table border=0 cellpadding=5 cellspacing=0 width=468>

<tr><td colspan=3 align="center">

</td></tr>

<tr><td colspan=3 align="center">

<nobr>Paul's BargainDog Newsletter - May 24, 2000</nobr></td></tr>

1602 {<tr><td width=33% valign="bottom" align="center">
 </td><td width=33% valign="bottom"
align="center">
 </td><td width=33% valign="bottom"
align="center">

1604 {</td></tr>

<tr><td width=33% valign="top" align="center">
 <table border=0 cellpadding=0 cellspacing=0 bgcolor="yellow">
 <tr><td>
 <nobr>

1608 {
Free!
 </td></tr></table></td><td width=33% valign="top" align="center">
 <table border=0 cellpadding=0 cellspacing=2 bgcolor="yellow">
 <tr><td>
 <nobr>

<s>\$34.95 </s>

\$14.95
 </td></tr></table></td><td width=33% valign="top" align="center">
 <table border=0 cellpadding=0 cellspacing=2 bgcolor="yellow">
 <tr><td>
 <nobr>

<s>\$34.99 </s>

\$16.99

</td></tr></table></td></tr>

<tr><td width=33% valign="top" align="center">

F16. 16A

F16. 16B

F16. 16C

F16. 16D

F16. 16

1606

F16. 16A

1614 {The Resurrected & Grave Indiscretion - VHS
Now watch Sting in Grave Indiscretion or be horrified by The Resurrected for FREE when you pay \$4.95 each for shipping!
At FreeStuffThisWeek.com
</td><td width=33% valign="top" align="center">Expedia Streets Deluxe & Trip Planner 2000
Get address-to-address routing, detailed driving directions, and trip-planning all in one with Expedia Streets and Trips 2000, 57% off with \$20 mail-in rebate!
At SoftwareBuyline
</td><td width=33% valign="top" align="center">Kideo Animated
"And the Oscar goes to..." Now you can make that dream come true with a personalized video from Kideo. Now 51% off!
At EToys
</td></tr>

1616 {<tr><td colspan=3 align=center>More Bargains From BargainDog:</td></tr><tr><td colspan=3 align=center><table width=100% border=0 cellspacing=0 cellpadding=0 bgcolor="#000066"><tr><td align="center" width=100%><nobr>Career & Professional</nobr></td></tr></table></td></tr>

1618 {<tr><td colspan=3 align=center>Sports Ball Mousepads \$12.95\$4.00</td><td colspan=3 align=center>Give your favorite sports fan a treat with their very own personalized mouse pad. Now 69% off!
At Personal Creations
</td></tr><tr><td colspan=3 align=center><table width=100% border=0 cellspacing=0 cellpadding=0 bgcolor="#000066"><tr><td align="center" width=100%><nobr>Electronics & Gadgets</nobr></td></tr></table></td></tr>

<tr><td colspan=3 align=center>Midland 75-507 14-Channel Family Radio (Single) \$79.95 </td></tr>

1620

1621

color="#AA3333">\$19.99

This tiny, inexpensive 2-way radio packs just enough features for the casual user to make it a terrific deal. Now 75% off!
At Amazon.com

<tr><td width="100%" border="0" cellspacing="0" cellpadding="0"> <td align="center" width="100%" style="background-color: #000066;"> <nobr>Movies</nobr> </td> </tr>		
<tr><td colspan="3" align="center"> Two Free Blockbuster Movie Rentals with \$25 Purchase Free! Now at PetsMart.com, spend \$25 and receive a Blockbuster Movie Card good for 2 FREE movie rentals! </td> </tr> <tr><td colspan="3" align="center"> <tr><td width="100%" border="0" cellspacing="0" cellpadding="0"> <td align="center" width="100%" style="background-color: #000066;"> <nobr>Apparel & Accessories</nobr> </td> </tr> </td>		
<tr><td colspan="3" align="center"> Men's Golfer Silk Tie \$26.00 This classic Renato Balestra Italian silk tie will make a winning impression on your next interview or date! Now save 37%! </td> </tr> <tr><td colspan="3" align="center"> <table width="100%" border="0" cellspacing="0" cellpadding="0"> <tr><td align="center" width="100%" style="background-color: #000066;"> <nobr>BargainDog Information</nobr> </td> </tr> </td>		
<tr><td colspan="3" align="left"> Subscription Information You are subscribed to this newsletter as "psorkin@wgslaw.com". </td>		

To change your preferences, customize your category selections, or unsubscribe from the newsletter, please go to Our Members Page.

Disclaimer

This e-mail is meant for informational purposes only, and is not a guarantee that the products listed may be purchased at the above prices. BargainDog, its affiliated and non-affiliated merchants make no promises or guarantees about the price, quality or availability of products it lists in this service. For a full description of BargainDog's policies, see our [terms and conditions](http://www.bargaindog.com/static/terms.htm#terms).

```
</td></tr>  
</table>
```

```
</body></html>
```

© 1999-2000 Sumbasa Media, Inc.

卷之三

FIG. 16D

DECLARATION FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled

METHOD AND APPARATUS FOR DELIVERING CUSTOMIZED INFORMATION ACCORDING TO A USER'S PROFILE

the specification of which is attached hereto unless the following is checked:

was filed on , as Application No. , bearing attorney docket No. , and was amended on (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or section 365(a) of any PCT International application designating at least one country other than the United States listed below and have also identified below any foreign application for patent or inventor's certificate or PCT International application having a filing date before that of the application on which priority is claimed:

Prior Foreign PCT International Application(s)and any priority claims under 35 U.S.C. §§119 and 365(a),(b):

			Priority Claimed	
(Number)	(Country-if PCT, so indicate)	(DD/MM/YY Filed)	[]	[]
			YES	NO
(Number)	(Country-if PCT, so indicate)	(DD/MM/YY Filed)	[]	[]
			YES	NO
(Number)	(Country-if PCT, so indicate)	(DD/MM/YY Filed)	[]	[]
			YES	NO

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

(Application Number)	(filing date)
(Application Number)	(filing date)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s), or §365(c) of any PCT International application(s) designating the United States of America listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

(Application No.)	(filing date)	(status-patented, pending, abandoned)
(Application No.)	(filing date)	(status-patented, pending, abandoned)

PCT International Applications designating the United States:

(PCT Appl. No.)	(U.S. Ser. No.)	(PCT filing date)	(status-patented, pending, abandoned)
-----------------	-----------------	-------------------	---------------------------------------

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Robert M. Abrahamsen	40,886	Jason M. Honeyman	31,624	Edward J. Russavage	43,069
John N. Anastasi	37,765	Robert E. Hunt	39,231	Stanley Sacks	19,900
Gary S. Engelson	35,128	Ronald J. Kranzdorf	20,004	Christopher S. Schultz	37,929
Neil P. Ferraro	39,188	Peter C. Lando	34,654	Alan B. Sherr	42,147
Thomas G. Field	45,596	Helen C. Lockhart	39,248	Robert A. Skrivanek, Jr.	41,316
Stephen R. Finch	42,534	Matthew B. Lowrie	38,228	Paul D. Sorkin	39,039
Edward R. Gates	31,616	William R. McClellan	29,409	Alan W. Steele	45,128
Richard F. Giunta	36,149	Daniel P. McLoughlin	46,066	Mark Steinberg	40,828
Peter J. Gordon	35,164	James H. Morris	34,681	Joseph Teja, Jr.	45,157
John C. Gorecki	38,471	M. Lawrence Oliverio	30,915	John R. Van Amsterdam	40,212
William G. Gosz	27,787	Timothy J. Oyer	36,628	Robert H. Walat	46,524
Lawrence M. Green	29,384	Edward F. Perlman	28,105	Lisa E. Winsor	44,405
George L. Greenfield	17,756	Michael J. Pomiczek	46,190	David Wolf	17,528
James M. Hanifin, Jr.	39,213	Elizabeth R. Plumer	36,637	Douglas R. Wolf	36,971
Therese A. Hendricks	30,389	Randy J. Pritzker	35,986	Ivan D. Zitkovsky	37,482
Steven J. Henry	27,900	Robert E. Rigby, Jr.	36,904		

Address all telephone calls to Paul D. Sorkin at telephone no. (617) 720-3500. Address all correspondence to:

Paul D. Sorkin
c/o Wolf, Greenfield & Sacks, P.C.,
Federal Reserve Plaza
600 Atlantic Avenue
Boston, MA 02210-2211

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



5/31/2000

Date

Inventor's signature

Full name of first or joint inventor: Elliot Shmukler

Citizenship: U.S.

Residence: Boston, MA

Post Office Address: 295 Newbury Street, #6, Boston, MA 02115



5/31/2000

Date

Inventor's signature

Full name of second joint inventor: Joshua J. Schanker

Citizenship: U.S.

Residence: Boston, MA

Post Office Address: 482 Mass. Ave., Apt. 1, Boston, MA 02118